Preparing More, Higher Quality Teachers and School Leaders for NC Public Schools

UNC Teacher Quality Research

Presentation to the House Select Committee on Education Innovation

February 19, 2013

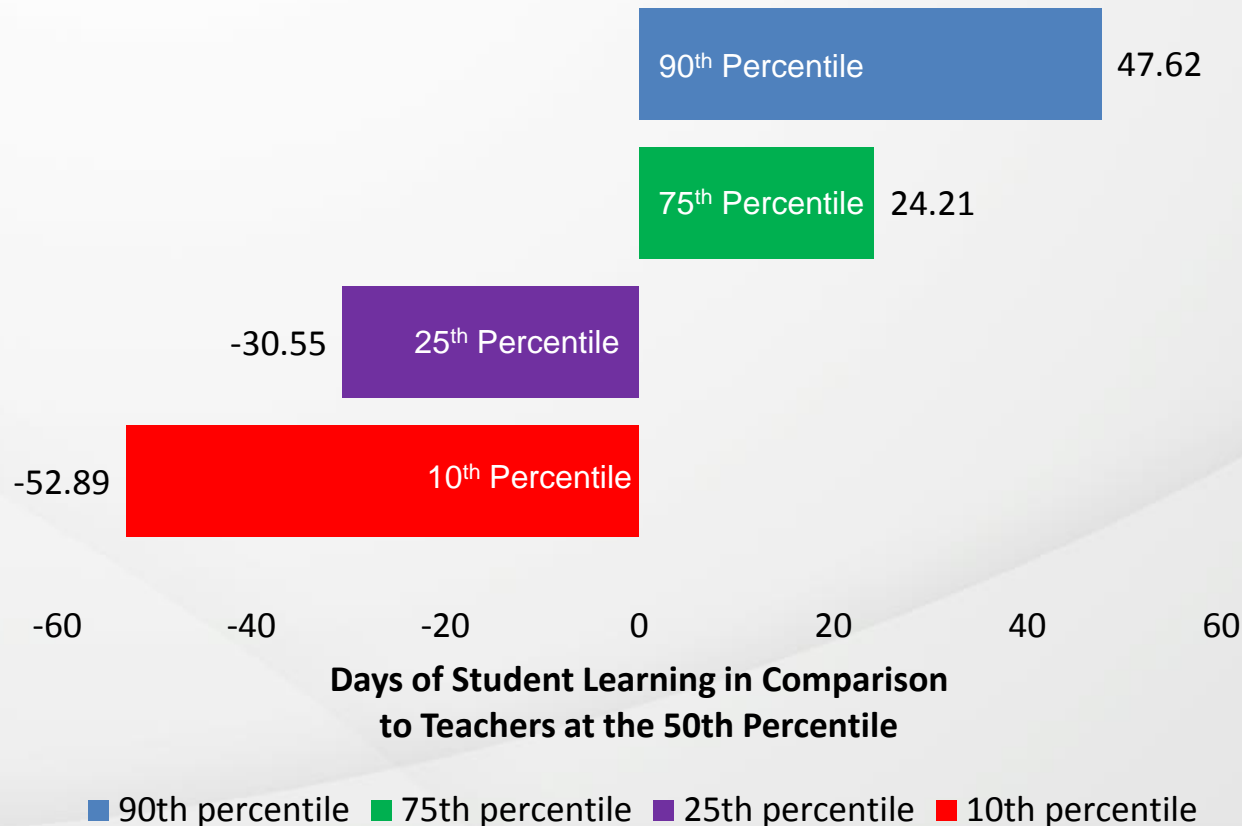**Alisa Chapman**
University of North Carolina General Administration

Elizabeth Cunningham
NC New Teacher Support Program

Michael Maher
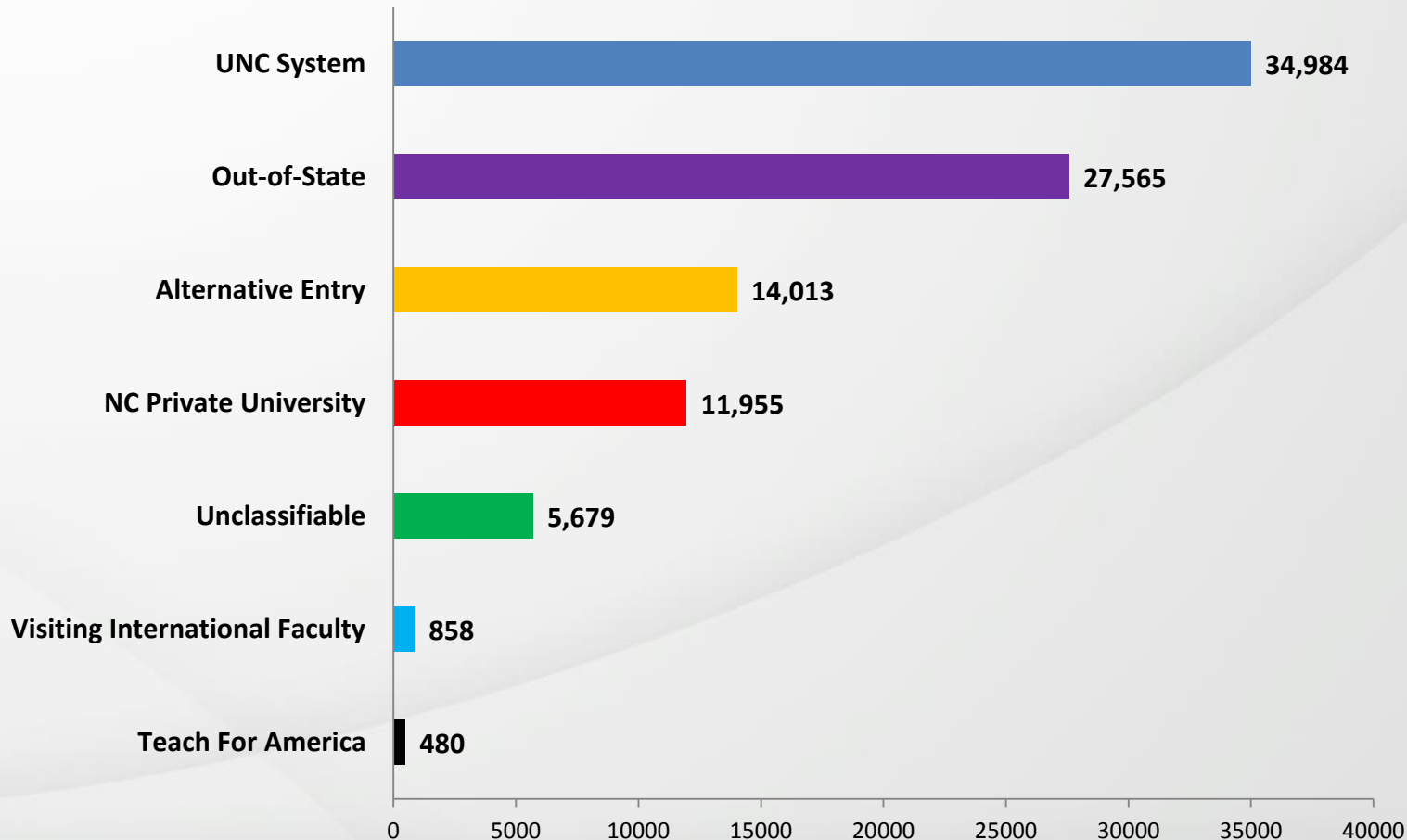North Carolina State University, College of Education

Teacher Effectiveness: Elementary Mathematics

- Teacher effectiveness is the most important resource affecting educational achievement that can be directly influenced by the public schools.

- Students with teachers at the 90th percentile have the equivalent of **100** more days of schooling than students with teachers at the 10th percentile.

University of North Carolina

North Carolina Teachers by Preparation Category
Number of Employed Teachers 2011-12 - 95,543

Category	Number
UNC System	34,984
Out-of-State	27,565
Alternative Entry	14,013
NC Private University	11,955
Unclassifiable	5,679
Visiting International Faculty	858
Teach For America	480

NC <u>Employed</u> Public School Teachers
Number of Employed Teachers - 95,543

2011-12: NC Public School Teachers by Preparation Category

36.62 %

63.38 %

■ UNC System

■ All Other Sources
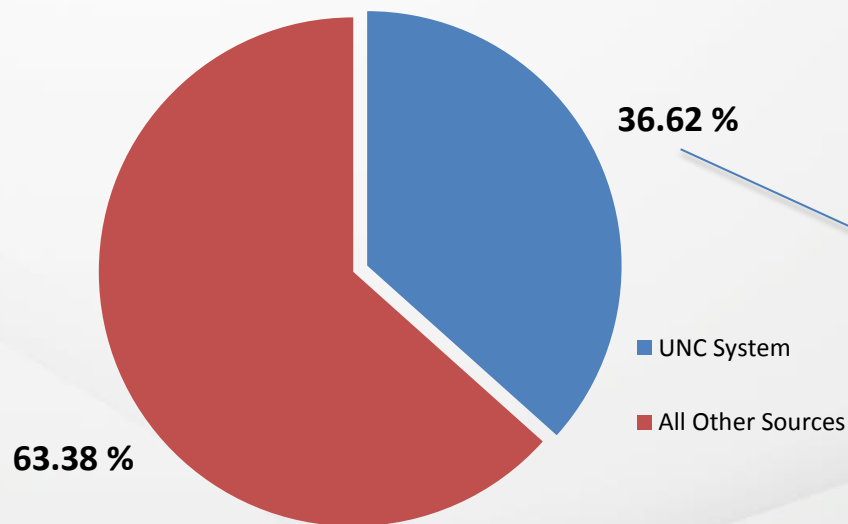
Characteristics of UNC System Prepared Teachers Employed in NC Public Schools

– 83% Female

– 15% Minority

– Age in 2011 - 38.7

– Teaching Experience - 12 Yrs

– Tested Subject – 30%

– School FRL – 59%

– School Minority – 47%
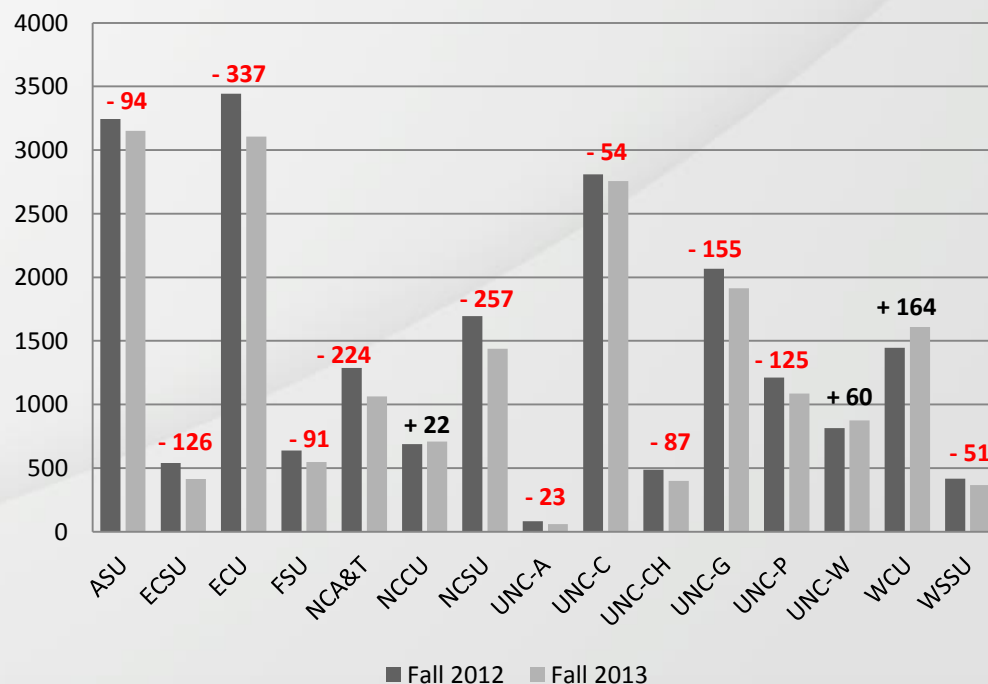
School Level Percentages:

– Elem & Elem/Middle School – 56%

– Middle School – 18%

– High School – 26%

UNC Teacher Preparation <u>Pipeline</u>

UNC Teacher Productivity

- UNC's Fifteen Teacher Education Programs prepare approximately 4,500 teachers each year

- Approximately 65% are prepared through undergraduate traditional preparation programs

- About one third are prepared in high need licensure areas – mathematics, science, middle grades, and special education

Fall 2012 / 2013 Enrollment in Education Programs
(Graduate and Undergraduate)

Bar chart showing Fall 2012 and Fall 2013 enrollment by institution:
- ASU: - 94
- ECSU: - 126
- ECU: - 337
- FSU: - 91
- NCA&T: - 224
- NCCU: + 22
- NCSU: - 257
- UNC-A: - 23
- UNC-C: - 54
- UNC-CH: - 87
- UNC-G: - 155
- UNC-P: - 125
- UNC-W: + 60
- WCU: + 164
- WSSU: - 51

Legend: ■ Fall 2012 ■ Fall 2013

2014 UNC Teacher Portals Analysis

Teacher Portals Analysis: Purpose, Data and Methods

We set out to answer:

- How does the performance of teachers prepared by the UNC System compare to the performance of teachers who enter NC classrooms with other types of preparation, for example, out-of-state, alternative entry, TFA?

- For the report, we analyzed 2.9 million test scores, 1.4 million students, and over 28 thousand teachers with less than 5 years of experience from all school districts in NC

- Value-added effects were estimated using multi-level models with 23 student, 9 classroom/teacher, and 12 school variables

Teacher Portal Impact Summary:
Value-Added Findings for Teacher Preparation Categories

| Teacher Preparation Category	*Less Effective* than UNC System Prepared Teachers	*More Effective* than UNC System Prepared Teachers	*No Different* than UNC System Prepared Teachers
NC Private University	3	0	8
Out-of-State University	5	0	6
Teach For America	0	9	2
Visiting International Faculty	1	2	6
Alternative Entry	3	0	8

Teacher Portal Summary:
Value-Added Findings by Level and Subject

| Level/Subject	Teacher Categories *Less* Effective than UNC System Prepared Teachers	Teacher Categories *More* Effective than UNC System Prepared Teachers
Elementary		
Elementary Math	Out-of-State	TFA, VIF
Elementary Reading	---	VIF
Elementary Science	NC Private, Out-of-State	TFA
Middle		
Middle Math	NC Private	TFA
Middle Reading	---	TFA
Middle Science	NC Private	TFA
Middle Algebra 1	---	TFA
High		
High School English	---	---
High School Social Studies	Out-of-State, Alt Entry	TFA
High School Math	Out-of-State, VIF, Alt Entry	TFA
High School Science	Out-of-State, Alt Entry	TFA
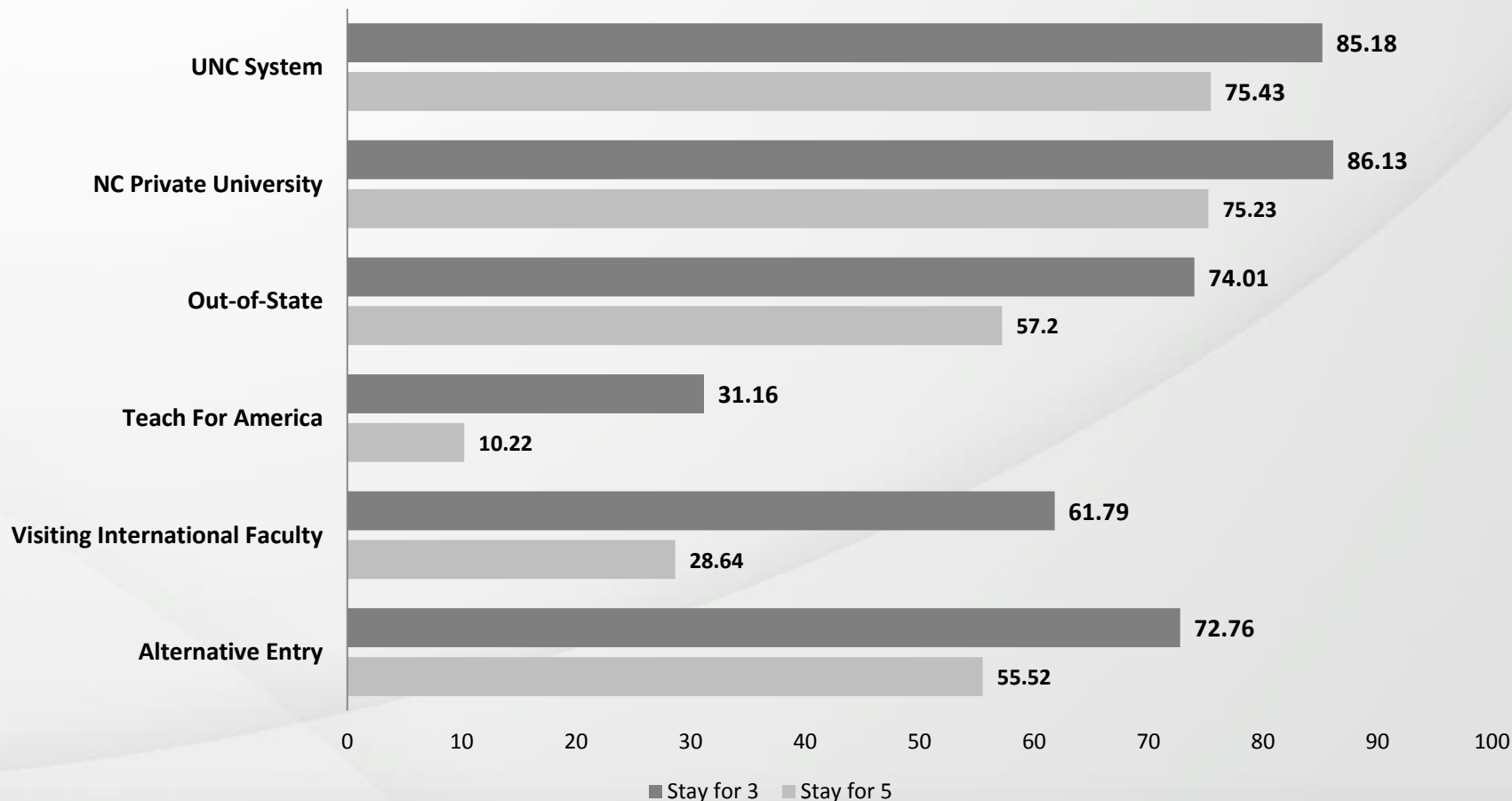
2011-12: _First Year_ NC Public School Teachers by Portal
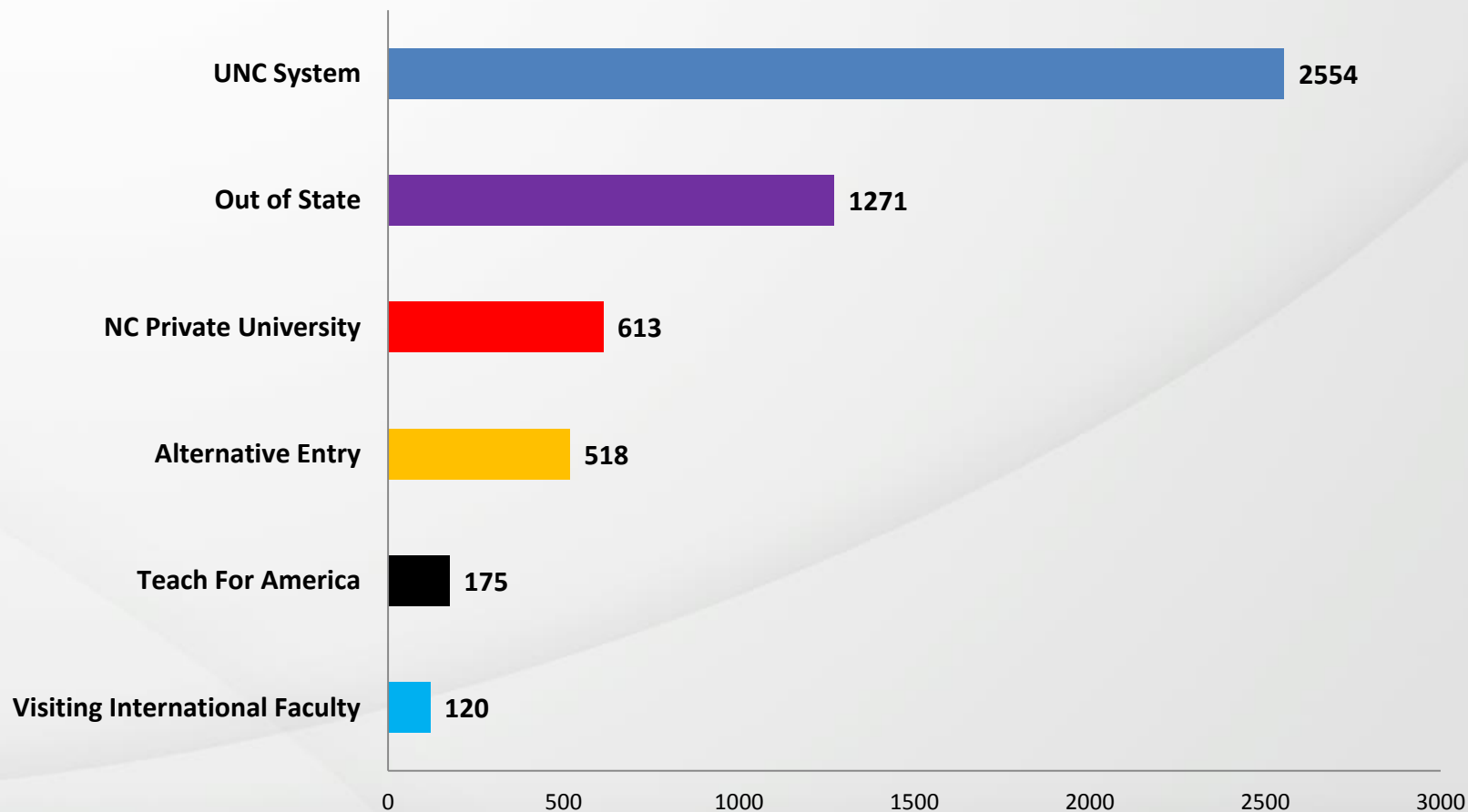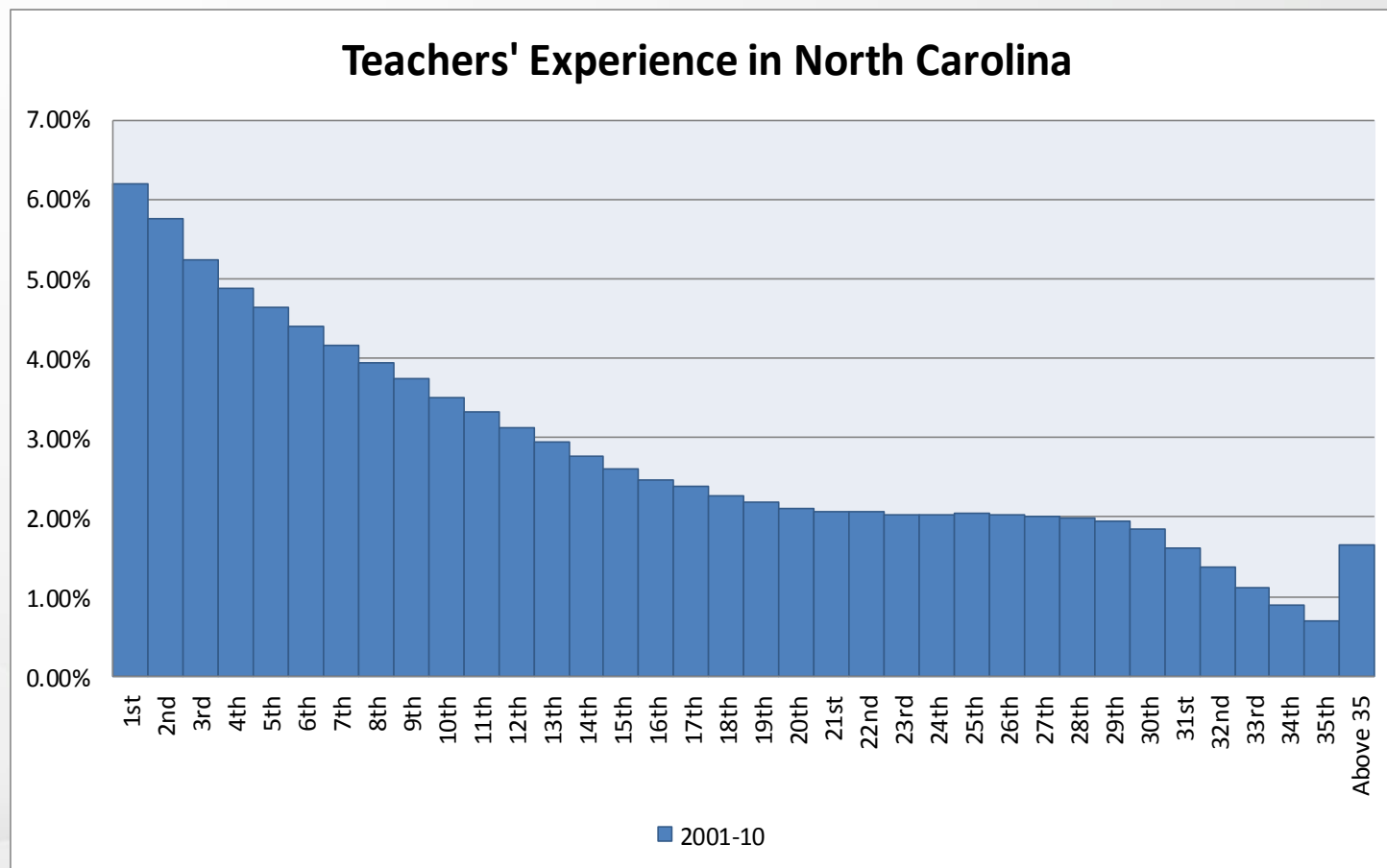
Support for Beginning Teachers

NC New Teacher Support Program

NC New Teacher Support Program

- Essential Components of the Program
  - For beginning teachers with no prior teaching experience
  - Provides support in first 3 years of service
  - Institute (based on TFA model and 5 days in length)
  - Instructional Coaching (classroom-based)
  - Customized Professional Development
  - Use of CLASS observational instrument
  - Offered to 5% lowest performing schools (NC RttT grant)
- Yr 1 served 35; Yr 2 served 450; **Yr 3 serving 1,150**

2013-14 Program Service Areas

1,150 teachers, 120 schools, 29 school districts

UNIVERSITY OF NORTH CAROLINA

- **Institute addresses**:

  – Success in the School and Community

  – Effective Instruction, Planning, and Assessment

  – Classroom Culture and Community

- **Individualized instructional coaching provides:**

  – High quality feedback targeted to improve teachers' growth as professionals and individuals

  – Use of aligned, non-evaluative observation tool used to set goals, improve instructional skills

- **Aligned professional development offers:**

  – Six days targeted to meet needs identified by teachers, coaches, and school leaders

  – Research-based curriculum focused on needs and development of beginning teachers

NC New Teacher Support Program Results

- 82% of Winter Institute attendees and 68% of Summer **Institute** attendees agreed or strongly agreed the Institute helped develop their confidence, knowledge, and skills.

- 77% of NC NTSP teachers *agreed or strongly agreed* their **instructional coach** helped develop their confidence, knowledge, and skills in teaching, compared to statistically lower rates for other supports provided.

- 85% of teachers *agreed or strongly agreed* NC NTSP **professional development** helped them develop confidence, knowledge, and skills, compared to statistically lower rates for other support provided.

NC New Teacher Support Program Results

- **Classroom observations** indicated that NC NTSP teachers had higher levels of instructional proficiency than a comparison sample.

- 86 percent of NC NTSP teachers **returned to teaching**; 83.5 percent **returned to teaching in North Carolina**.

Taking Action to Improve Teacher Preparation

Addressing Teacher Performance through a Two-Part Strategy

Part I: Identify instrument to assess how well student teachers can perform basic teaching functions

- Plan solid lessons
- Carry the lessons out in real classrooms
- Assess what their students have learned
- Use assessment results to help struggling students and to improve their own instruction

Part II: Help UNC teacher educators learn how to use the instrument

- Help student teachers improve their practice
- Improve their own teacher preparation programs

Teacher Performance Assessment Pilot (edTPA)

- Identify valid/reliable instrument to assess how well student teachers can perform basic teaching functions

- Help teacher educators learn how to use the instrument

- Selected the "edTPA" developed at Stanford University
  - "TPA" = Teacher Performance Assessment
  - "ed" = educative, not just to assess but also <u>to educate student teachers and improve preparation programs</u>

- Pilot-tested in 25 states, including North Carolina

Why Pilot the edTPA in North Carolina

- Ensure the edTPA is really usable and helpful in UNC teacher preparation programs

- Ensure the edTPA results really predict teacher effectiveness in the classroom

- "Effectiveness" = Do teachers with high scores from the edTPA instrument produce high levels of student learning in the classroom?

- Seven UNC Campuses are Participating in the Pilot
    - ECU, UNC-CH, WSSU, NCSU, UNCA, UNCC and WCU

Transforming Research into Action

- UNC is taking ownership and responsibility for "evidence based" program improvements

    - Improve existing UNC teacher preparation programs

    - Develop, pilot and evaluate innovations in UNC preparation programs

    - Increase UNC productivity of new teachers to off-set dependency on lesser performing portals

    - Improve recruitment and selection into UNC teacher preparation programs

- Identifying gaps in lower performing portals that could be addressed through strategies with UNC preparation programs

- Coordinating with our K12 partners to develop, pilot, and evaluate innovations